

By



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,875	03/15/2001	Christopher J. Edge	10275US01 (EKC 90082)	5572

1333 7590 10/19/2005

BETH READ
PATENT LEGAL STAFF
EASTMAN KODAK COMPANY
343 STATE STREET
ROCHESTER, NY 14650-2201

EXAMINER

HARRISON, CHANTE E

ART UNIT PAPER NUMBER

2677

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/808,875

Applicant(s)

EDGE, CHRISTOPHER J.

Examiner

Chante Harrison

Art Unit

2677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2005 and 28 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 30, 37, 43 and 44 is/are pending in the application.
- 4a) Of the above claim(s) 16-29, 31-36 and 38-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 30, 37, 43 and 44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Amendment filed on 3/23/05 and Response to Restriction and Election Requirement filed on 7/28/05.
2. Claims 1-15, 30, 37, 43 and 44 are pending in the case. Claims 1, 9, 30, 37, 43 and 44 are independent claims. Claim 8 has been amended. Claims 16-29, 31-36 and 38-42 have been canceled.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-7, 9-15, 30, 37, 43 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Naoya Katoh, US 5,754,682, 5/1998.

As per independent claim 1, Katoh discloses obtaining a white point correction for a display device (col. 7, ll. 35-45; col. 8-9, ll. 58-6); obtaining a chromatic correction for the display device (col. 7, ll. 35-45; col. 9-10, ll. 60-6); and generating in a device-independent color space adjusted device-independent color coordinates for the display device based on device-independent coordinates associated with a hard copy in the device-independent color space, the white point correction and the chromatic correction (col. 13-14, 44-45; col. 15, ll. 10-57).

Art Unit: 2677

As per dependent claims 2, and 13, Katoh discloses obtaining the white point correction by determining a white point correction matrix (col. 12, ll. 44-67); and obtaining the chromatic correction by determining a chromatic correction matrix (coll. 8-9, ll. 57-35).

As per dependent claims 3 and 14, Katoh discloses displaying a color on a display device (col. 5, ll. 42-54), the color being defined by an original white point matrix (col. 9-10, ll. 60-6) in a D50 illuminant condition (col. 18, ll. 55-60); and adjusting at least some white point matrix values so that visual appearance on the display device is visually equivalent to a print (col. 6, ll. 42-54; col. 9-10, ll. 60-6; col. 12, ll. 44-67).

As per dependent claim 4, Katoh discloses adjusting at least some white point matrix values comprises adjusting maximum phosphor settings on a display (i.e. sensors used to obtain the chromaticity and luminance of the environment may be replaced by a parameter setting circuit for entering optical environment variables via computer) (col. 18, ll. 25-26; col. 7, ll. 30-47, 62-67; col. 18, ll. 35-37, 49-54).

As per dependent claims 5 and 15, Katoh discloses displaying a color on a display device (col. 5, ll. 42-54), the color being defined by an original chromatic matrix (col. 8, ll. 30-67) in a D50 illuminant condition (col. 18, ll. 55-67; col. 19, ll. 13-16); and adjusting at least some chromatic matrix values so that visual appearance on the display device is visually equivalent to a print (col. 9, ll. 1-35; col. 6, ll. 42-56).

Art Unit: 2677

As per dependent claim 6, Katoh discloses adjusting at least some chromatic matrix values comprises adjusting chromaticity values in an RGB color space (col. 8-9, ll. 57-35).

As per dependent claim 7, Katoh discloses adjusting chromaticity values in an RGB color space comprises adjusting chromaticity values in an AdobeRGB(D50) color space (col. 8-9, ll. 57-35; col. 18, ll. 55-60).

As per independent claim 9, Katoh discloses determining device-independent coordinated in a device-independent color space defining a color on a hard copy (col. 15, ll. 10-48). The rationale as applied in the rejection of claim 1 applies herein.

As per dependent claim 10, Katoh discloses displaying the color using the corrected coordinates (col. 15, ll. 10-52).

As per dependent claim 11, Katoh discloses the displayed color is visually equivalent to the color on the hard copy (col. 6, ll. 42-54).

As per dependent claim 12, Katoh discloses the white point correction is a white point correction matrix (col. 9-10, ll. 60-6) and the chromatic correction is a chromatic correction matrix (col. 8-9, ll. 57-35).

Art Unit: 2677

As per independent claim 30, Katoh discloses a display device (Fig. 11 "3"); a memory device (Fig. 11 "50"); and a processor (Fig. 11 "1") coupled to the memory device and the display device, wherein the processor; obtains a white point correction (col. 9-10, ll. 60-6) for the display device from the memory device (col. 18, ll. 35-42, 64-67; col. 7, ll. 35-55); obtains a chromatic correction (col. 8-9, ll. 57-6) for the display device from the memory device (col. 18, ll. 35-42, 64-67; col. 7, ll. 35-55). The rationale as applied in the rejection of independent claim 1 applies herein.

As per dependent claim 37, Katoh discloses receives a white point correction (col. 9-10, ll. 60-6; col. 15, ll. 30-35) for a display device as input (col. 18, ll. 35-42, 64-67); receives a chromatic correction (col. 8-9, ll. 57-6; col. 15, ll. 30-35) for the display device as input (col. 18, ll. 35-42, 64-67). The rationale as applied in the rejection of independent claim 1 applies herein.

As per independent claim 43, Katoh discloses a color profile data structure thereon (col. 5, ll. 45-50), the color profile data structure corresponding to a display device (col. 7, ll. 20-30) and including adjusted device-independent illuminant condition values that do not correspond to actual device-independent illuminant conditions associated with the display device (col. 8-9, ll. 57-35) such that colors rendered on the display device using the color profile data structure are visually equivalent to colors rendered on a printing device (col. 6, ll. 42-56; col. 15, ll. 25-56).

As per independent claim 44, the rationale as applied in the rejection of independent claim 1 applies herein.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoya Katoh, US 5,754,682, 5/1998.

As per dependent claim 8, Katoh discloses a chromatic correction matrix (col. 8-9, ll. 55-35) and a white point correction matrix (col. 9-10, ll. 60-25) that includes the chromatic corrected values.

Katoh fails to disclose generating a single correction matrix that includes both the white point and chromatic corrections.

It would have been obvious to one of ordinary skill in the art to include generating a single correction matrix that includes both the white point and chromatic corrections with the method of Katoh because a matrix solving for the corrected white point values by multiplying the corrected chromatic values, which originate from a chromatic correction matrix, can substitute the calculated chromatic values with the original

Art Unit: 2677

chromatic matrix for inclusion in the white point correction matrix for the advantage of simplifying the mathematic equations and minimizing the mathematical steps in solving the equations.

Response to Arguments

4. Applicant's arguments with respect to claims 1-42 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 571-272-7659. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chante Harrison
Examiner
Art Unit 2677

Ch
October 12, 2005

AMR A. AWAD
PRIMARY EXAMINER

